Mathematics Standard
Articulated by Grade Level
GLOSSARY

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absolute value	a number's distance from zero on a number line; the absolute value of -4 is 4; the absolute value of 4 is 4 symbolically, |-4| = 4 and |4| = 4
actual measure	the exact measurement of an object
acute angle	an angle whose measure is between 0 and 90°
addends	numbers used in the mathematical operation of addition
addition	a mathematical operation based on "putting things together"
additive inverses	two numbers whose sum is zero (opposites)
adjacent angles	two coplanar angles that share a common side and a common vertex but do not share common interior points
algebraic expression	a group of numbers, symbols, and variables that express a single or series of operations; mathematical phrase with one or more terms, one or more variables
algebraic sentence	an equation or inequality that represents a relationship between two expressions
algorithm	a set of step-by-step instructions for completing a task
alternate exterior angles	angles formed by a transversal intersecting two lines; angles on opposite sides of the transversal, having two different vertices, and outside the lines
alternate interior angles	angles formed by a transversal intersecting two lines; angles on opposite sides of the transversal, having two different vertices, and between the lines
analog clock	a device, with an hour, minute and second hand which shows a continuous sweep of time passing rather than in "jumps"(digital)
angle	a geometric figure consisting of two rays with a common endpoint (vertex)
angle bisector	a line or ray that divides an angle into two congruent angles
appropriate math terminology	vocabulary that accurately defines mathematical, concepts, operations and content at a given grade level
appropriate measure of accuracy	the degree of accuracy required for a given mathematical task (i.e., approximating the number of cubic inches needed in determining the volume of space for packing would have a need for less accuracy than say, the measurement of a piece of molding to fit precisely on a door frame)
approximation	a value that is sufficiently exact for a specified purpose
arc	a part of a circle that consists of two points, called endpoints, and all points of the circle between them
area	The 2-dimensional space enclosed by the perimeter is called the area.
arithmetic fact	any of the basic addition and multiplication numerical statements and the corresponding subtraction and division relationships
arithmetic sequence	a set of ordered terms in which the difference between consecutive terms is constant

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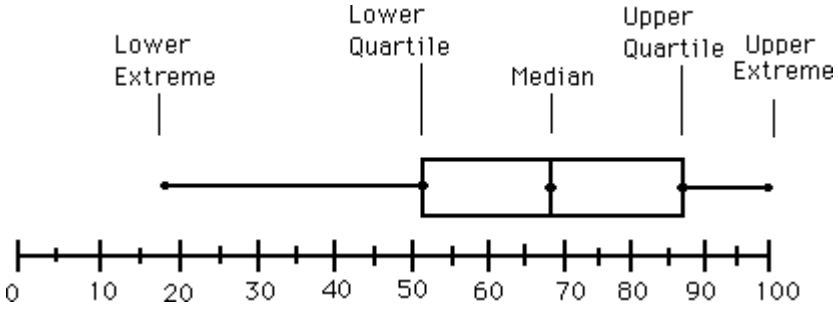
array	a rectangular arrangement of objects in rows and columns (no gaps and no overlaps)
ascending order	a listing in which numbers or terms are organized in increasing value.
associative property	the property that states for real numbers *a*, *b*, and *c*, $(a + b) + c = a + (b + c)$ and $(ab)c = a(bc)$. Essentially this property is a grouping of three terms where the sum and product of the first two with the third is the same as the sum or product of the last two and the first
attribute	a common feature of a set of objects or numbers
average	See mean.
axiom	a self-evident truth; a truth without proof and from which further statements, or theorems, can be derived
axis	either of two perpendicular number lines used to form a coordinate plane
bar graph	a graph in which horizontal or vertical bars represent data
base	a term used as a factor for repeated multiplication (i.e., in 4^7 , 4 is the base)
base of a polygon	the side(s) that is perpendicular to the height
base of a polyhedron	either of the two congruent parallel faces of a prism; the face of a pyramid that does not have to be a triangle
biased sample	a sample that is not representative of a population
biconditional	a logical statement containing the phrase "if and only if" (iff) ; both the statement and its converse are true
binomial	an expression consisting of two terms connected by a plus or minus sign (i.e., 4a+6)
bisect	to divide into two congruent parts
box and whisker plot	a graph that uses a rectangle to represent the middle 50% of a set of data and line segments (or whiskers) where each represents 25% of the data; A line segment representing the median value divides the rectangle so that each section represents 25% of the data.



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calculation	action, process, or result of a mathematical computation
capacity	a measure of how much (volume) a container can hold
causation	an action that produces an effect
Celsius	metric measurement of temperature (i.e., 32 degrees Celsius, 32°c)
census	data collected from every member of the identified population
centimeter	a metric unit of length equivalent to 1/100 of a meter
chord of a circle	a segment joining any two points on the circle
circle	a set of points in a plane equidistant from a given point called the center
circle graph	a graph in which a circle is divided into sectors in order to compare different parts of a data set to the entire set (i.e., pie graph)
circumference	the perimeter of a circle
closure property	a set is closed under an operation if the application of the operation on any members in the set always results in a member of that set
coefficient	the numerical factor in an algebraic term (i.e., in 7x, 7 is the co-efficient)
collinear	a set of points is said to be **collinear** if they lie on a single straight line
combinations	a group of unordered items or events taken from a larger group (i.e., the number of three-person committees that can be chosen from a group of 21)
common denominator	any nonzero number that is a multiple of the denominators of two or more fractions
common factor	any number that is a factor of two or more numbers (i.e., 4 is a common factor of 8 and 12)
common multiple	a term that contains two or more terms as factors
commutative property	the property in addition and multiplication that states the order in which two terms are added or multiplied does not change the results. For real numbers a and b, $a + b = b + a$ and $ab = ba$
complementary angles	two angles, the sum of whose measures is 90°
complex fraction	a fraction that contains one or more fractions in the numerator or denominator
complex number	a number that can be written in the form a + b*i*, where a and b are real numbers and *i* is the imaginary number, $\sqrt{-1}$
composite number	a number that has more than two numerical factors
concave polygon	a polygon with one or more diagonals that have points outside the polygon
conclusion	the *then* clause of a conditional statement
conditional statement	a statement in "if-then" form where the "if" clause is called the hypothesis and the "then" clause is called the conclusion
cone	a three-dimensional figure generated by rotating a right triangle about one of its legs

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concrete objects	physical objects used to represent mathematical situations
congruent	coinciding exactly when superimposed
conjecture	an unproven statement based on observations
consecutive	in order, with nothing missing
consecutive exterior angles	angles formed by a transversal intersecting two lines; angles on the same side of the transversal, having two different vertices, and outside the two lines; if the two lines are parallel, the same side exterior angles are supplementary
consecutive interior angles	angles formed by a transversal intersecting two lines: angles on the same side of the transversal, having two different vertices, and inside the two lines; if the two lines are parallel, the same side interior angles are supplementary
constant	a quantity that always stays the same
construct	a conclusion or result built or put together systematically
contextual situation	relating a mathematical problem to a real modeled or illustrated circumstance
continuous data	data in which there are no gaps, jumps or holes; data that can be measured and broken down into smaller parts and still have meaning; temperature and time are continuous
contrapositive of a statement	a new statement obtained by exchanging the negation of the conclusion with the negation of the hypothesis of a conditional statement
converse of a statement	a new statement obtained by exchanging the hypothesis and the conclusion of a conditional statement
convex polygon	a polygon with each interior angle measuring less than 180^{o}; all diagonals of a convex polygon lie inside the polygon
coordinate system (Cartesian)	a two dimensional system in which the coordinates of a point are its distances from the origin, the intersection of the x and y axes
coordinates of a point	an ordered pair of real numbers that locates a point in a plane
coplanar	in the same plane
correlation	an association between two variables
corresponding angles	angles formed by a transversal intersecting two lines; angles on the same side of the transversal, having two different vertices, and in the same relative position; if the two lines are parallel, the corresponding angles are congruent
cosine	in a right triangle, the ratio of the length of the leg adjacent to an acute angle to the length of the hypotenuse
counterexample	an example that shows that a conjecture is not always true
counting numbers	the set of numbers consisting of 1, 2, 3, 4, 5, 6, ... (natural numbers)
cube	the third power of a number; a regular 3-dimensional figure having six congruent square faces
customary system	the measuring system used most often in the United States (i.e., inches, pounds, gallon)

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of measurement	
cylinder	a 3-dimensional figure composed of two congruent and parallel circular regions joined by a curved surface
data	information gathered by observation, questioning or measurement, usually expressed with numbers
data sets	a defined group of information, especially numerical
decimal number system	a place value number system based on groupings by powers of ten
decimal point	the point used to write values less than one in the base ten number system
deductive reasoning	a series of logical steps in which a conclusion is drawn directly from a set of statements (premises) that are assumed to be true
degree	a unit of measure for angles based on dividing a circle into 360 equal parts; or a unit of measure for temperature
denominator	the number of equal parts into which a whole is divided (i.e., in the fraction ¾, 4 is the denominator)
density property	between any pair of rational numbers there is another number
dependent events	two events in which the outcome of the second event is affected by the outcome of the first event
dependent variable	in a function, the variable that is determined by the value of the related independent variable
descending	an order in which numbers or terms are organized in decreasing value
diagonal	a line segment joining two non-adjacent vertices of a polygon
diameter	a chord that contains the center of the circle
difference	the result of a subtraction
digit	in the base ten numeration system, one of the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
digital clock	a device for telling time, makes jumps from number to number (digital clocks usually use numbers with a colon separating the hour from the minutes, 6:30)
dilation	a transformation that either enlarges or reduces a geometric figure proportionately
dimension	a measure in one direction (i.e., length or width)
discrete data	involves a count of data items that can't be broken down into smaller units, such as number of defects, people, or items
discrete mathematics	the study of mathematics dealing with objects that can assume only certain "discrete" values; discrete objects can be characterized by integers whereas continuous objects require real numbers
dissection	to separate into parts, usually equal
distance	the length of the shortest line segment joining two points
distance formula	a formula used to find the distance between two points identified by their ordered pairs: $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

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distortions of sets of data	the use of incorrect proportion, design variation in comparing to sets of data, lack of context or insignificant data used in direct comparison with meaningful data
distributive property	the distributive property of multiplication over addition or subtraction is a multiplication of a group of terms such that the multiplier is multiplied by each and every term in the group a, b, and c, a(b + c) = ab + ac and a(b - c) = ab – ac
dividend	in a division problem, the quantity to be divided
divisibility	one whole number is divisible by another whole number if the result of the division is a whole number without a remainder
division	a mathematical operation based on separating into equal parts
divisor	in a division problem, the quantity by which another quantity is divided
domain	the set of values for the independent variable of a function (i.e., usually, the x values of a function)
edge of a polyhedron	a line segment where two faces of a polyhedron meet
edge (vertex-edge graph)	the path that joins two vertices
elapsed time	time between two events
ellipsis	the mark **"…"** to indicate the continuance of a pattern
empty set	a set that contains no elements
endpoint	the point at either end of a line segment; also, the initial point of a ray
equation	a mathematical sentence in which equivalent values are separated by an equal sign
equivalent	equal in value, but in a different form
equilateral triangle	a triangle with three congruent sides
estimate	a close rather than exact answer
evaluate	to find the numerical value of a mathematical expression
even number	an integer that is divisible by two without a remainder
event	one of the many occurrences that can take place during a probability activity
expanded notation	a way to write numbers that shows the place value of each digit. (i.e., 343 = 300+40+3)
experimental (empirical) probability	relating to the outcomes of an actual performance of a probability activity
exponent	a number placed to the right of and above a non-zero base that indicates how many times the base is used as a factor; a base with a zero exponent is equal to 1 (i.e., $5^0 = 1$, $5^3 = 5 \cdot 5 \cdot 5$ and $5^{-3} = \frac{1}{5^3} = \frac{1}{5 \cdot 5 \cdot 5}$)
exponential function	a function commonly used to study growth and decay; it has a form $y = a^x$

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expression	a mathematical phrase containing one or more terms linked by operation symbols
face of a polyhedron	a flat surface on a 3-dimensional object
fact family	a collection of related addition and subtraction facts, or multiplication and division facts, made from the same numbers
factor (noun)	a number or expression that evenly divides another quantity (i.e., 4 is a factor of 12; and (x + l) is a factor of x^2 + 3x + 2)
factor (verb)	to represent a number as a product of factors
Fahrenheit	the customary scale system for temperature measurement (32°F)
finite set	a set that contains a countable number of elements
formula	a general mathematical rule using variables
fractal	an algebraically generated complex geometric shape having the property of being endlessly self-similar under magnification
fraction	a number in the form $\frac{a}{b}$, where *b* is not zero
fractional part	part of a whole or part of a group that is less than a whole
frequency table	a collection of data that specifies the number of occurrences in each of several categories
function	(input – output) a dependent relationship between two sets of numbers in which a value in the first set determines one and only one element in the second set
geometric model	a model of mathematical concepts using geometric representations
geometric sequence	a set of ordered terms in which the ratio between consecutive terms is constant
geometric solid	a 3-dimensional shape bounded by surfaces (i.e., rectangular prism, pyramid, cylinder, cone, and sphere)
graph	a pictorial device that shows a relationship between variables or sets of data
greatest common factor	largest factor that two or more numbers have in common (GFC) (i.e., the GFC of 8 and 12 is 4)
grouping symbols	symbols of inclusion; parentheses, brackets, braces or bars (i.e., ( ) , [ ] , {} ,)
height	the perpendicular distance to a base from a vertex or between bases
hexagon	a polygon with six sides
histogram	a vertical bar graph with each bar representing a certain interval of data
horizontal	parallel to or in the plane of the horizon; in a coordinate grid, the x-axis is a horizontal line
hypotenuse	the side opposite the right angle in a right triangle
hypothesis	the *if* clause of a conditional statement

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identity element	a number when used in an operation with a given number leaves the given number unchanged; the identity element for addition is zero; the identity element for multiplication is 1
image	a figure created as the result of a transformation
imaginary numbers	the square root of a negative number expressed using *i* ($\sqrt{-1} = i$)
improper fraction	a fraction in which the numerator is greater than the denominator
independent events	two events in which the outcome of the second event does not related to the outcome of the first event
indirect proof	a deductive proof using contradiction or elimination to rule out all possible conclusions except the desired one
inductive reasoning	making a generalization based on observation of specific cases or patterns (i.e., formulating a rule after considering several parts of a pattern)
inequality	a statement indicating that two quantities are not equal
inference	a conclusion drawn from data
infinite set	the set in which the number of elements cannot be counted or determined (never ending)
inscribed angles	an angle with its vertex on the circle and with sides that are chords of the circle
integers	the set of numbers consisting of the whole numbers and their opposites … -2, -1, 0, 1, 2 …
interval	the set of numbers between two numbers a and b; the interval may include a or b
inverse operation	a related but opposite process (i.e., multiplication is the inverse of division)
inverse of a statement	a new statement obtained by negating both the hypothesis and the conclusion of a conditional statement
irrational numbers	a set of numbers that cannot be expressed as a ratio of two integers (i.e., $\pi, \sqrt{2}$)
isosceles triangle	a triangle that has at least two congruent sides
iterative pattern	a pattern generated by using an initial value and repeatedly applying an operation (i.e., 4,7,10,13, is adding 3 each time)
kite	a quadrilateral with two distinct pairs of adjacent, congruent sides
lateral surface	in a prism or a pyramid, it is the face that is not a base
least common multiple	the smallest number for which two or more numbers are factors (i.e., the LCM of 3, 4, and 6 is 12)
line	an undefined geometric term; a straight path that extends infinitely in opposite directions; a line that has no thickness
line graph	a graph in which points are connected by line segments to represent data
line of best fit	a line drawn on a scatter plot to estimate the relationship between two sets variables in a set of data
line of symmetry	a line that divides a figure into two congruent parts that are mirror images of each other
line plots	a sketch of data in which check marks, x's, or other marks above a number line shows the frequency of each value

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line segment	a part of a line that consists of two points, called endpoints, and all the points between them
linear equation	a polynomial equation containing one or more terms in which the variable is raised to the power of one but no higher
linear function	a function that has a constant rate of change and can be modeled by a straight line
liter	a metric unit of capacity, equal to the volume of a cube that measures ten centimeters on a side
logic	a system of reasoning used to validate arguments
lowest common denominator	the least common multiple of the denominators of every fraction in a given collection of fractions
magnitude	size or quantity
manipulatives	a wide variety of physical materials, objects, and supplies that students use to foster the learning of abstract ideas in mathematics
matrix	a rectangular array of numbers or letters arranged in rows and columns (matrices)
mass	matter within an object
maximum	the greatest value
mean	a measure of central tendency where the sum of a set of numbers is divided by the number of elements in the set; often referred to as the average
measures of central tendency	numbers that communicate the "center" or "middle" of a set of data. The mean, median, and mode are statistical measures of central tendency.
median	a measure of central tendency that identifies a value such that half the data is above the value and half the data is below the value when the data is listed in order
metric system of measurement	a measurement system based on the base-ten numeration system (i.e., meter, liter, gram)
midpoint	a point on a geometric figure halfway between two points
minimum	the least value
minuend	in subtraction, the minuend is the number from which you are subtracting ex. 90,000 minuend -3,456 subtrahend 86,544 difference
mixed number	a number that is equal to the sum of a whole number and a fraction
mode	a measure of central tendency that is the value or values that occurs most frequently in a given set of numbers
model (noun)	a representation of concrete materials, objects or drawings

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model (verb)	use of concrete materials and the use of the symbolic
monomial	an expression consisting of a single term (i.e., 5y)
multiple of a number	a number into which the given number may be divided with no remainder
multiplication	the operation of repeated addition (i.e., 4 x 3 is the same as 4+4+4)
natural numbers	the set of counting numbers consisting of 1, 2, 3, 4, 5, 6...
negative number	a number less than zero
net of a polyhedron	a two-dimensional representation of the surface of a three-dimensional figure that has been unfolded
normal curve	in statistics, the distribution of data along a bell-shaped curve that reaches its maximum height at the mean
normal distribution	a "bell-shaped" probability distribution; there are as many values that are less than the mean as there are values that are greater than the mean
number line	a diagram that represents numbers as points on a line with a uniform scale
number sentence	an equation or inequality with numbers
numerator	the number or expression written above the line in a fraction; it tells how many equal parts of a total number of parts are described by a fraction
obtuse angle	an angle whose measure is greater than 90° and less than 180°
octagon	a polygon with eight sides
odd number	an integer that is not divisible by two
open sentence	a statement that contains at least one unknown (i.e., 6 + x = 14)
operation	an action performed on some set of quantities (i.e., addition, raising to a power)
order of operations	the sequence in which operations are performed when evaluating an expression
ordered pair	a pair of numbers used to locate points in the coordinate plane
ordinal number	a whole number that names the position of an object in a sequence
origin	the intersection of the *x*- and *y*-axes in a coordinate plane; the origin is described by the ordered pair (0,0)
outcome	one of the possible events in a probability situation
outcome set	set of all outcomes of a given situation
outliers/extreme values	numerical data piece that are significantly larger or smaller than the rest of the data in a set
parallel lines	lines in the same plane that never intersect and are always the same distance apart
parallelogram	a quadrilateral with opposite sides parallel and congruent
pattern	a set or sequence of shapes or numbers that are repeated in a predictable manner
pentagon	a polygon with five sides

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percent	a ratio that compares a number to 100 (%)
perfect square	a whole number whose square root is a whole number
perimeter	the distance around a shape or figure
permutation	an ordered arrangement of a set of events or items (if you put the items or events into a different order, you have a different permutation)
perpendicular lines	two lines that intersect to form right angles
pi	the ratio of the circumference of a circle to its diameter. Pi is an irrational number and approximately equal to 3.14 or $\frac{22}{7}$ (π)
pictograph	a graph that uses pictures or symbols to represent data
place value	the value of the position of a digit in a numeral
plane	an undefined geometric term; a flat surface that extends infinitely in all directions
point	an undefined geometric term; denotes an exact location in space; a point has no size
polygon	a closed 2-dimensional figure made up of segments, called sides, which intersect only at their endpoints, called vertices
polyhedron	a closed 3-dimensional figure in which all the surfaces are polygons
polynomial	an expression consisting of two or more terms
population	in statistics, an entire set of objects, observations, or scores that have something in common
postulate	a mathematical statement that is accepted as true without proof
power	a number with a base and an exponent
predictions	use of base information to produce an approximation of change or result
pre-image	a picture or object before it undergoes a transformation
premise	a statement that is given to be true
prime number	a positive integer that has exactly two different positive factors, itself and one; one is not a prime number
prime factorization	a composite number expressed as the product of factors that are prime numbers
prism	3-dimensional figures that have two congruent and parallel face that are polygons; the remaining faces are parallelograms
probability	the measure of the likelihood of an event occurring
product	the result of multiplication
proof	a logical argument that shows why a statement must be true

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proper fraction	a fraction whose numerator is an integer smaller than its integral denominator
properties of operations	mathematical principals that are always true (i.e., commutative, associative, distributive and inverses)
proportion	the statement of equality between two ratios
proportionality	the concept of having equivalent ratios
pyramid	a 3-dimensional figure whose base is a polygon and who's other faces are triangles that share a common vertex
Pythagorean theorem	in a right triangle, the sum of the squares of the lengths of the legs is equal to the square of the length of the hypotenuse ($a^2+b^2= c^2$)
quadrant	one of the four sections into which the coordinate plane is divided by the *x*- and *y*-axes
quadratic equation	a polynomial equation containing one or more terms in which the variable is raised to the second power but no higher
quadratic formula	the formula used to find the roots of quadratic equations; If $ax^2+bx+c=0,\ a\neq 0,$ then $x=\frac{-b\pm\sqrt{b^2-4ac}}{2a}$.
quadratic function	a function that has an equation of the form: $y=ax^2+bx+c,\ a\neq 0$; a function of degree two
quadrilateral	a polygon with four sides
quartiles	the quartiles divide an ordered set of data into four groups of the same size
quotient	the result of division of one quantity by another (dividend ÷ divisor = quotient)
radius of a circle	a segment whose endpoints are the center of the circle and a point on the circle (radii)
random sample	each item or element of the population has an equal chance of being chosen as part of a sample of the population
range	the set of output values for a function
range (of data set)	the difference between the greatest and least number in a set of numbers
rate	a ratio comparing two different units (i.e., miles per hour or cents per pound)
ratio	a comparison of two values by division; a ratio can be expressed as *a* to *b*, $\frac{a}{b}$, or *a*:*b*
rational number	a number that can be expressed as a ratio of two integers
ray	a geometric figure that extends infinitely along a straight path from a point, called its endpoint
real numbers	the set of numbers combining rational and irrational numbers
reasonable estimations	approximations based on mathematical reasoning that are with in the desired degree of accuracy (i.e., 35+43= reasonable estimation would be 75 or 80 not 100 or 700)

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reciprocals	two numbers whose product is equal to one (multiplicative inverses)
rectangle	a quadrilateral with two pairs of congruent, parallel sides and four right angles (square, parallelogram, quadrilateral, polygon)
recursive pattern	a pattern that uses the solution from previous steps to generate the solution to the next step. (i.e., 2,2,4,6,10,16…)
reflection	a transformation creating a mirror image of a figure on the opposite side of a line
reflex angle	an angle that is greater than 180° and less than 360°
reflexive property	the property that states a quantity is equal to itself; the property that states an object is congruent to itself
regular polygon	a convex polygon in which the angles are equiangular and sides are equilateral
repeating decimal	a decimal in which one or more digit(s) repeats without termination
rhombus	a parallelogram with four congruent sides. (plural: rhombi)
right angle	an angle whose measure is 90°
right triangle	a triangle that contains a right angle
root	the inverse of a power
rotation	a transformation in which a figure is turned a given angle and direction around a point
rounding	approximating a number by analyzing a specific place value
sample	a part of the total population; used in statistics to make predictions about the characteristics of the entire group
sample space	a list of all possible outcomes of an activity
scale	(1) an instrument used for weighing; (2) a system of marks at fixed intervals used in measurement or graphing
scale factor	the ratio between the lengths of corresponding sides of two similar figures
scalene triangle	a triangle with no sides the same length and no congruent angles
scatter plot	a graph of the points representing a collection of data
scientific notation	a form of writing a number expressed as a power of 10 and a decimal number greater than or equal to one and less than ten
secant	a line that intersects a circle at exactly two points; a line that contains a chord of a circle
sector	a region defined by a central angle and an arc
signed number	a positive or negative number
similar figures	figures that are the same shape but not necessarily the same size

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sine	in a right triangle, the ratio of the length of the leg opposite the given angle to the hypotenuse
skip counting	counting by equal intervals (i.e., 2,4,6… or 4,8,12…)
slope of a line	the measure of steepness of a line; the ratio of rise over run; or change in y over change in x
solid	a 3-dimensional figure
solution	a value for a variable that makes an equation or inequality true
solution set	a set consisting of all values that make an equation or inequality true
space	the set of all possible points
sphere	a 3-dimensional figure made up of all points in space equidistant from a given point called the center
square	a parallelogram with four congruent sides and four right angles
square root	one of the two equal factors of a number
standard notation	a number written with one digit for each place value in base ten; the most familiar way of representing whole numbers, integers, and decimals is standard notation (i.e., three hundred fifty six is 356)
statistics	the collection, organization, description and analysis of data; statistics are quantitative data
stem-and-leaf plot	a display of data in which digits with larger place values (10's) are "stems" and digits with smaller place values (1's) are "leaves"
straight angle	an angle whose measure is 180°; it is formed by two opposite rays
subscript	a number written to the right of and slightly below a term; usually used for indexing
substitution property	the property that allows equal values to replace each other
subtraction	a mathematical operation that gives the difference between two numbers; subtraction also is used to compare two numbers or sets
subtrahend	in subtraction, the subtrahend is the number being subtracted 750 minuend - 84 subtrahend 666 difference
sum	the result of an addition
supplementary angles	two angles the sum of whose measures is 180°
surface area	the total area of the faces (including the bases) and curved surfaces of a three-dimensional figure
symbol	a sign or token used to represent something, such as an operation, quantity, or relation
symmetric property	the property that states for real numbers a and b, if $a = b$, then $b = a$
symmetry	a correspondence in size, form, and arrangement of parts, related to a plane, line, or point; for example, a figure that has line symmetry has two halves that coincide if folded along a line of symmetry

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system of equations	a set of two or more equations with the same number of unknowns
tangent	in a right triangle, the ratio of the length of the leg opposite an acute angle to the leg adjacent to the acute angle
tangent to a circle	a line in the plane of a circle that touches a circle in exactly one point (tangent line)
t-chart	a mathematical organizer to display and record data, patterns, or functions/rules in an organized way
term	a product or quotient of numerals or variables or both; terms are separated by plus or minus signs in an expression
terminating decimal	a decimal that contains a finite number of digits
tessellation	a covering of a plane without overlaps or gaps using combinations of congruent figures
theorem	a mathematical statement or proposition derived from previously accepted results
theoretical probability	the probability of an event without doing an experiment or analyzing data
transformation	an operation that creates an image from an original figure or pre-image
transitive property	the property that states for real numbers *a, b,* and *c, if* $a = b$ and $b = c$, then $a = c$ *or if* $a > b$ *and* $b > c$ *then,* $a > c$ *or if* $a < b$ *and* $b < c$*, then* $a < c$
translation	a transformation that moves every point on a figure a given distance in a given direction
transversal	a line that intersects two or more lines in a plane at different points
trapezoid	a quadrilateral that has exactly one pair of parallel sides
Tree diagram	a tree diagram used to find all the possible permutations for a set of items or the prime factorization of a number of a number
trend	the general drift, tendency, or direction of a data
trend line	a line that represents a general pattern for a set of data
triangle	a polygon with three sides
trigonometric ratios	the ratios of the lengths of pairs of sides in a right triangle (i.e., sine, cosine and tangent)
unit fraction	a fraction with a numerator of one
unit price	the price of something for one unit of measure
valid argument	an argument that is correctly inferred or deduced from a premise
variability	numbers that describe how spread out a set of data is (i.e., range and quartile)
variable	a symbol that represents a quantity
venn diagram	a representation that uses circles to show relationships between sets
vertex-edge graph	a structure consisting of vertices and edges, where the edges indicate a mapping among the vertices (i.e., the vertices may represent players in a tournament, and the edges indicate who plays whom)
vertex	the point at which the rays of an angle, two sides of a polygon, or the edges of a polyhedron meet (vertices)

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vertical	at right angles to the horizon
vertical angles	the opposite angles formed when two lines intersect
volume	the measure of the capacity of a three-dimensional figure, measured in cubic units
whole	the entire object, collection of objects, or quantity being considered
whole numbers	the set of numbers consisting of the counting numbers and zero (i.e., 0, 1, 2, 3 . . .)
***x*-intercept**	the coordinate at which the graph of a line intersects the x-axis
***y*-intercept**	the coordinate at which the graph of a line intersects the y-axis